

## **DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2014-0228 Directorate Identifier 2013-NM-216-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Airbus Model A330-200 Freighter, A330-200 and -300, and A340-200, -300, -500, and -600 series airplanes. This proposed AD was prompted by reassessment of an unsafe condition related to MZ-type spoiler servo-controls (SSCs) that did not remain locked in the retracted position (hydraulic locking function) after manual depressurization of the corresponding hydraulic circuit. This reassessment resulted in the determination that performing repetitive operational tests of all SSC types is necessary. This proposed AD would require repetitive operational tests of the hydraulic locking function on each SSC installed on the blue or yellow hydraulic circuits, and replacing any affected SSC with a serviceable SSC. We are proposing this AD to detect and correct loss of the hydraulic locking function during take-off, which, in combination with one inoperative engine, could result in reduced controllability of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. **ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the instructions for submitting comments.
  - Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
   Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC
   20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email <a href="mairworthiness.A330-A340@airbus.com">airworthiness.A330-A340@airbus.com</a>; Internet <a href="http://www.airbus.com">http://www.airbus.com</a>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

# **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601

Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1138; fax (425) 227-1149.

#### **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2014-0228; Directorate Identifier 2013-NM-216-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <a href="http://www.regulations.gov">http://www.regulations.gov</a>, including any personal information you provide. We will

also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness

Directive 2013-0251 dated October 15, 2013; Correction dated October 16, 2013

(referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

During post-flight maintenance checks accomplished on an A330 and on an A340 airplane, it was identified that seven spoiler servo-controls MZ series had lost their hydraulic locking function. The results of the subsequent technical investigation accomplished in-shop by the part supplier confirmed the system failure was due to a sheared seal on the blocking valve, ensuring the blocking function of the spoiler. It is suspected that the seal damage may have occurred during accomplishment of a modification to fit a new design of maintenance cover on wing, required by EASA AD 2008-0160

[(http://ad.easa.europa.eu/blob/easa\_ad\_2008\_0160.pdf/AD\_2008-0160)], [which corresponds to FAA AD 2009-18-20, Amendment 39-16017 (74 FR 46313, September 9, 2009)].

This condition, if not detected and corrected, in combination with one engine inoperative at take-off, could result in reduced control of the aeroplane.

Prompted by these findings, Airbus issued All Operators Telex (AOT) A330-27A3185 and AOT A340-27A4181 to request a one-time operational test of the Hydraulic Locking Function for aeroplanes on which MZ type Spoiler Servo Control (SSC) Part Number (P/N) MZ4339390-12 or P/N MZ4306000-12 are fitted, and EASA issued AD 2012-0009 <a href="http://ad.easa.europa.eu/blob/easa">http://ad.easa.europa.eu/blob/easa</a> ad 2012 0009.pdf/AD 2012-0009 [which corresponds to FAA AD 2012-25-10,

Amendment 39-17291 (77 FR 76228, December 27, 2012)] to require accomplishment of this test.

Since that [EASA] AD was issued, Airbus re-assessed the situation and determined that it is necessary to introduce repetitive inspections [operational tests] of the SSC, irrespective of SSC type. Airbus issued three SBs for those repetitive inspections [operational tests] on all A330, A340, and A340-500/600 aeroplanes.

For the reason described above, this [EASA] AD requires repetitive operational tests of the hydraulic locking function of the SSC installed on the Blue and Yellow hydraulic circuits, irrespective of the SSC type, and, depending on test results, replacement of the SSC.

This [EASA] AD has been republished to correct the date of publication.

You may examine the MCAI in the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a> by searching for and locating it in Docket No. FAA-2014-0228.

#### **Relevant Service Information**

Airbus has issued the following service information. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

- Airbus Mandatory Service Bulletin A330-27-3195, dated December 7, 2012.
- Airbus Mandatory Service Bulletin A340-27-4188, dated December 7, 2012.
- Airbus Mandatory Service Bulletin A340-27-5059, dated April 10, 2013.

## FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in

the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

# **Costs of Compliance**

We estimate that this proposed AD affects about 77 airplanes of U.S. registry.

We also estimate that it would take about 6 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$39,270, or \$510 per product.

We estimate that it would take about 3 work-hours per product to do any necessary SSC replacement that would be required based on the results of the proposed operational test. Required parts would cost about \$35,000 per SSC. We have no way of determining the number of aircraft that might need these replacements.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This proposed regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

# **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
  - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Airbus: Docket No. FAA-2014-0228; Directorate Identifier 2013-NM-216-AD.

## (a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### (b) Affected ADs

None.

### (c) Applicability

This AD applies to Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; Model A340-211, -212, -213, -311, -312, and -313 airplanes; and Model A340-541 and -642 airplanes, certificated in any category; all manufacturer serial numbers (MSN).

### (d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

## (e) Reason

This AD was prompted by reassessment of an unsafe condition related to MZ-type spoiler servo-controls (SSCs) that did not remain locked in the retracted

position (hydraulic locking function) after manual depressurization of the corresponding hydraulic circuit. This reassessment resulted in the determination that performing repetitive operational tests of all SSC types is necessary. We are issuing this AD to detect and correct loss of the hydraulic locking function during take-off, which, in combination with one inoperative engine, could result in reduced controllability of the airplane.

## (f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

## (g) Repetitive Operational Tests

- (1) At the time specified in paragraph (g)(2) of this AD: Accomplish an operational test of the hydraulic locking function on each SSC (any type), when fitted on the Blue or Yellow hydraulic circuits, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (g)(1)(i), (g)(1)(ii) or (g)(1)(iii) of this AD. Repeat the operational test thereafter at intervals not to exceed 48 months.
- (i) Airbus Mandatory Service Bulletin A330-27-3195, dated December 7, 2012 (for Model A330-200 Freighter, A330-200 and -300 series airplanes).
- (ii) Airbus Mandatory Service Bulletin A340-27-4188, dated December 7, 2012 (for Model A340-200, and -300 series airplanes).
- (iii) Airbus Mandatory Service Bulletin A340-27-5059, dated April 10, 2013 (for Model A340-500 and -600 series airplanes).

- (2) At the latest of the times specified in paragraphs (g)(2)(i), (g)(2)(ii), and (g)(2)(iii) of this AD, do the operational test specified in paragraph (g)(1) of this AD.
  - (i) Within 48 months since first flight of the airplane.
- (ii) Within 48 months since accomplishing the most recent operational test specified in the applicable Airbus All Operator Telex (AOT) A330-27A3185 or AOT A340-27A4181, both dated January 4, 2012.
  - (iii) Within 24 months after the effective date of this AD.

## (h) Replacement of Affected SSCs

If, during any operational test required by paragraph (g)(1) of this AD, the hydraulic locking function of an SSC fails the test, before further flight, replace the affected SSC with a serviceable part, in accordance with the Accomplishment Instructions of the applicable service bulletin specified in paragraph (g)(1)(i), (g)(1)(ii) or (g)(1)(iii) of this AD.

### (i) No Terminating Action

Doing the replacement required by paragraph (h) of this AD is not terminating action for the repetitive operational tests required by paragraph (g) of this AD.

# (j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local

Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Information may be emailed to:

9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the

local flight standards district office/certificate holding district office. The AMOC

approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they were approved by the State of Design Authority (or its delegated agent, or the DAH with a State of Design Authority's design organization approval). For a repair method to be approved, the repair approval must specifically refer to this AD. You are required to ensure the product is airworthy before it is returned to service.

### (k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information European Aviation Safety Agency Airworthiness Directive 2013-0251 dated October 15, 2013; Correction dated October 16, 2013, for related information. This MCAI may be found in the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a> by searching for and locating it in Docket No. FAA-2014-0228.

(2) For service information identified in this AD, contact Airbus SAS,

Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex,

France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email

airworthiness.A330-A340@airbus.com; Internet <a href="http://www.airbus.com">http://www.airbus.com</a>.

You may view this referenced service information at the FAA, Transport Airplane

Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of

this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on April 4, 2014.

Michael Kaszycki,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[Billing Code: 4910-13-P]

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